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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,703	07/07/2003	Fuaida Harun	SC12793MP	5066
23125	7590	04/22/2005	EXAMINER	
FREESCALE SEMICONDUCTOR, INC. LAW DEPARTMENT 7700 WEST PARMER LANE MD:TX32/PL02 AUSTIN, TX 78729			WILLIAMS, ALEXANDER O	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,703

Applicant(s)

HARUN ET AL.

Examiner

Alexander O. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 18-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/7/03 & 1/19/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Serial Number: 10/613703 Attorney's Docket #: SC12793MP

Filing Date: 7/7/2003;

Applicant: Harun et al.

Examiner: Alexander Williams

Applicant's election without traverse of Species IV (figure 6) (claims 1 to 8 and 10 to 17), filed 2/15/2005, has been acknowledged.

This application contains claims 9 and 18 to 27 drawn to an invention non-elected without traverse.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities: On page 6, paragraph [0020], line 6, "integrated circuit 14" should probably be --integrated circuit 12— since previously labeled and 14 is previously defined as a "via capture pad 14".

Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bond pad comprising: **a photo mask area**; a clearance area located within the photo mask area; a land area, located within the clearance area, for receiving at least one insulated bond wire, and wherein at least one of the photo mask area, the clearance area and the land area has **at least one sharp edge**

that assists a pattern recognition system of a wire bonder in locating the at least one bond wire on the land area, and wherein the photo mask area, the clearance area and the land area surround the via; and a plug located within the via, wherein the at least one insulated bond wire is electrically coupled to the via in claim 1 and the bonding pad comprising: **a photo mask area** surrounding the via; a clearance area located within the photo mask area and surrounding the via; a land area, located within the clearance area and surrounding the via, for receiving at least one bond wire, wherein at least one of the photo mask area, the clearance area and the land area has **at least one sharp edge that assists a pattern recognition system of a wire bonder in locating the at least one bond wire on the land area in claim 10** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1 to 8 and 10 to 17 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear and confusing to what is meant by and what shows "the bonding pad comprising: **a photo mask area**; a clearance area located within the photo mask area; a land area, located within the clearance area, for receiving at least one insulated bond wire, and wherein at least one of the photo mask area, the clearance area and the land area has **at least one sharp edge that assists a pattern recognition system of a wire bonder in locating the at least one bond wire on the land area**, and wherein the photo mask area, the clearance area and the land area surround the via; and a plug located within the via, wherein the at least one insulated bond wire is electrically coupled to the via." What material(s) makes up or what material(s) represent the photo mask area? Where and what is the sharp edge that assists a pattern recognition system of a wire bonder?

In claim 10, it is unclear and confusing to what is meant by and what shows "A bonding pad electrically coupled to a via that extends from one side of a substrate to an opposing side of a substrate, the bonding pad comprising: **a photo mask area** surrounding the via; a clearance area located within the photo mask area and surrounding the via; a land area, located within the clearance area and surrounding the via, for receiving at least one bond wire, wherein at least one of the photo mask area, the

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clearance area and the land area has **at least one sharp edge that assists a pattern recognition system of a wire bonder in locating the at least one bond wire on the land area.**" . " What material(s) makes up or what material(s) represent the photo mask area? Where and what is the sharp edge that assists a pattern recognition system of a wire bonder?

Any of claims 1 to 8 and 10 to 17 not specifically addressed above are rejected as being dependent on one or more of the claims which have been specifically objected to above.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/774,668,700,701,758,702,698,690-693,784,786 361/767,768,262,782,719 174/252,259,255,266, 29/846	4/18/05
Other Documentation: foreign patents and literature in 257/774,668,700,701,758,702,698,690-693,784,786 361/767,768,262,782,719 174/252,259,255,266, 29/846	4/18/05
Electronic data base(s): U.S. Patents EAST	4/18/05

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O. Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexander O Williams
Primary Examiner
Art Unit 2826

AOW
4/18/05